

What Is Life?: Understand Biology In Five Steps by Paul Nurse

Life is all around us but what exactly is life? This book by the Nobel laureate Paul Nurse offers a highly accessible guide to five fundamental principles of biology that define life and explain where it came from and how it evolves. The book takes the reader on an exciting journey of discovery, starting with the essential properties of cells that underpin the way that our bodies work. It then moves on to describe how our cells are controlled by genes and key chemical processes, and along the way gives us a hint of the sorts of illnesses that come about when these control mechanisms go wrong. Finally, in a broader context, the book addresses how an understanding of what life is can help mankind face major challenges in the future, ranging from climate change and pandemics, through to food security and loss of biodiversity.

Paul Nurse is a biologist who spent his entire career revealing how living cells work. Part of the book's great appeal is that it gives a unique insight into the process of biomedical research, and uses examples of his personal experiences, in and out of the lab, to illustrate the challenges, lucky breaks, and exciting moments of discovery. The book is also a shining example of how knowledge of complex science can be communicated in a clear, concise way for the non-expert.

This book is recommended reading for anyone with an interest in the biology of life. Arguably, it is a must read for those considering a college or university course on a subject allied to biomedical sciences and medicine.

Some questions to consider whilst you read this book may include:

- Do you think life can be understood through the five fundamental principles of biology that Paul Nurse explores?
- Do any of these five principles take your interest? If so, you may want to explore one or two of them in further detail!
- Does the author's assessment of how we can apply an understanding of life to help tackle mankind's major challenges convince you? If so, why? If not, why?

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